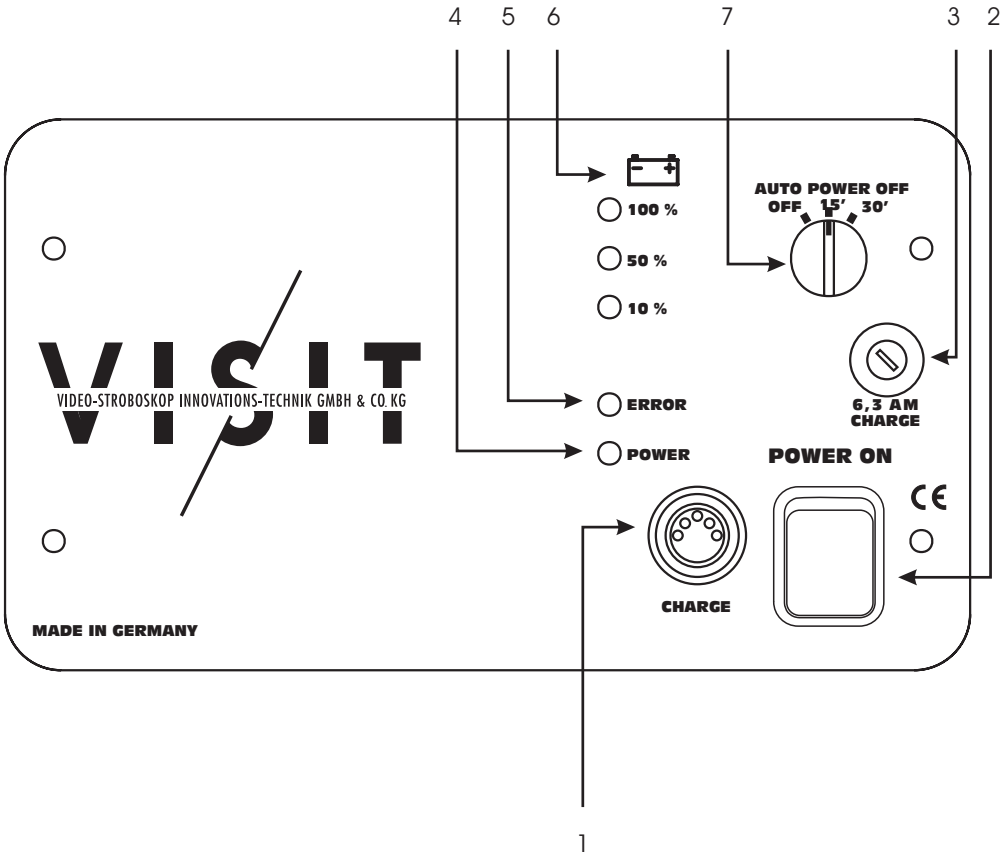
Mobile Power Generator MPG 1500

User Manual

VISIT
VIDEO-STROBOSKOP INNOVATIONS-TECHNIK GMBH & CO KG

Mobile Power Generator MPG 1500

Front Panel



VISIT
GmbH & Co.KG
Robert-Bunsen-Str. 3
D-97076 Würzburg-Lengfeld
GERMANY

Tel./Phone:	+49 (0) 931/27090-0
Fax:	+49 (0) 931/27090-35
E-Mail:	info@visit-gmbh.de
Internet:	http://www.visit-gmbh.de

Please pay particular attention to the following:

1. **Read the user manual before putting the generator into operation and pay close attention to the individual safety instructions.**

2. **Never open the generator. – High voltage, danger of death!**

3. **Never put your hand or any objects into the socket contacts. Touching the socket contacts can endanger your life.**

4. **Protect the device from dampness and water drops.**

5. **Do not operate the generator in the vicinity of flammable objects or materials or in an environment where explosions might occur.**

1 Introduction

Dear Customer,

With the purchase of your MPG 1500 mobile power generator you have acquired an extremely high-quality device which was developed and manufactured in Germany. Please observe the regulations in effect when using the generator, so that you can enjoy it for many years without exposing yourself to any danger. Pay particular attention to the safety instructions before and during the initial operation of the apparatus. If you have any questions concerning its utilisation we will be happy to assist you at any time.

VISIT

2 Table of contents

1 Introduction 3
2 Table of contents 3
3 Scope of delivery 4
4 Intended use 4
5 Prohibited use 5
6 General safety instructions 5
7 Overview of the operating controls 6
8 Starting up 7
9 Operation 7
10 Charging the battery 9
11 Car Adapter 10
12 Technical data 10
13 Troubleshooting 11
14 Maintenance 11
15 Waste disposal 12
16 Accessories 12
17 Customer service 12
18 EG declaration of conformity 13

User manual – As of November 2007
Subject to technical changes. Printing errors excepted. The values provided are for guidance and are not to be considered in the legal sense as warranted characteristics. Values may vary due to component tolerances.

3 Scope of delivery

The MPG 1500 mobile power generator is provided with a battery tray and an integrated 12V/7.2Ah battery.

The MPG 1500 is available in the following versions:
115V, *Item No. 977*
230V, *Item No. 976*

4 Intended use

The MPG 1500 generates sinusoidal supply voltage of 230V or 115V with a frequency of 50 Hz from a 12V/7.2Ah lead acid battery and makes this available on two sockets (master and slave).

The generator version (115V or 230V) is indicated on the sockets. Blue sockets are used for the 115V version and red sockets are used for the 230V version.

Appliances that are designed for mains voltage of either 230V or 115V can be operated using these sockets.

Only three-conductor connection cables with an intact grounding connection should be used. A maximum of only one load per socket should be connected. The use of power distribution sockets is not permitted. The apparatus is designed for a dry environment and should not be operated in moist surroundings.

Sample applications

- Operation of a laptop computer
- Operation of a small television while camping
- Charging cellphones and similar small battery-operated devices
- Charging digital camera batteries and accessories
- Drills, hedge clippers etc.

It is also possible to operate studio flash units.
You will find instructions for starting up and operating your generator in Chapters 8 and 9 on page 7ff.

5 Prohibited use

The apparatus must be used only as described above. In particular, it is not intended for other electrical applications. The connection of power distribution boxes is prohibited.

6 General safety instructions

Besides the general rules governing electrical appliances, because of the potential danger associated with generators, there are special precautions to be taken and these are described below. Therefore, please read and follow the safety instructions and the user manual before putting the generator into operation.

- Touching socket contacts can endanger your life. Therefore, never put fingers or objects into the sockets. Please observe the same safety rules that you would while using power sockets in your home.
- The apparatus is not suitable for use by children. In general, children should be kept at a distance from the generator.
- When the apparatus is switched off, it is still possible that a charge may be present. Therefore, the socket contacts should not be touched even when the apparatus is switched off.

- The generator must not be operated in a moist environment and must not come in contact with water or other liquids.
- If the apparatus is damaged or if there is reason to believe that a defect exists, switch it off immediately and bring it to an authorised HENSEL or VISIT repair shop. Do not under any circumstances open the apparatus yourself.
- Operation of the apparatus is only permissible with lead acid batteries in conjunction with VISIT accessories. It is essential that the correct polarity be used.

- When using the car adapter, connect the red terminal to the positive pole of the external battery and connect the black terminal to the negative pole of the battery.
- In the event of a short circuit in the lead acid battery, the resulting high currents may lead to fire. Therefore, always ensure that the apparatus is correctly polarised when connected and do not operate it in a flammable environment.
- Always turn off the main switch before changing the battery. If an external battery is to be used with the VISIT Car Adapter, always turn off the main switch until all connections are secured at the terminals and correctly polarised. Only then may the mobile power generator be put into operation once again.
- Only three-conductor connection cables with an intact grounding connection may be used.

7 Overview of the operating controls

1 CHARGE:
Connection socket for charger
2 POWER ON:
Main switch
3 6,3 AM:
Fuse for battery charging
4 POWER:
Operation status display
5 ERROR:
Error display
6
Charge status display (10%, 50%, 100%)
7 AUTO POWER OFF:
Automatic switch-off
(OFF / after 15 minutes / after 30 minutes)

8 Starting up

Slide the original VISIT or HENSEL battery tray with a built-in 12V/7.2Ah gel cell lead acid battery all the way into the opening provided so that the tray locks.

Turn on the apparatus using the main switch **2** (POWER ON). LED display **6** should show the charge status at 100%. The operating mode display (POWER) **4** should be lit up.

Now the loads can be connected as described in the next chapter.

As battery capacity is reduced, the battery charge status is shown at levels of 50% and 10% (LED display **6**).

If an electronic error occurs or if the apparatus becomes overheated, error light **5** comes on. In this event, the apparatus must be turned off immediately.

The AUTO POWER OFF **7** rotary switch can be set so that the appliance will automatically shut down after 15 or 30 minutes.

If this occurs, press the main switch **2** (POWER ON) to switch the apparatus on again.

This AUTO POWER OFF function may be turned off using the OFF setting. In that event, the apparatus can be turned on and off only by use of the main switch.

9 Operation

You can connect different loads to the MPG 1500; see Chapter 4 for examples. A maximum of one load may be connected to each socket. The use of power distribution sockets to connect several loads is not permitted. Loads to be connected must have a three-conductor cable with an intact grounding connection. Master or slave sockets or both can be used for the connection.

Attention:
During operation, the apparatus consumes power itself. Therefore, switch on the apparatus only immediately before usage. Being switched on for a longer period of time significantly reduces battery capacity.

Connecting loads with constant power draw
For connecting loads with constant current draw (i.e. bulbs, computers), only the master socket can be used.

A load of 100 W can be operated by the MPG 1500 on a full battery for about 50 minutes.

Connecting studio flash appliances
It is also possible to operate studio flash appliances. The following combinations are the maximum connections allowed:

- To the master socket: one device with a maximum of 1500 Ws
- To the master socket: one device with a maximum of 1000 Ws and to the slave socket: one device with a maximum of 500 Ws
- To the master and slave sockets, each one: one device with a maximum of 500 Ws

In this type of use, the master device is charged first and then the slave device. In that manner, the high starting charge current is distributed. The combined flash frequency when 2 devices are used corresponds to the sum of both connected devices.

The apparatus is protected against shorts. If it becomes overloaded, there is no damage to the apparatus.

Using a 500 Ws flash unit without a modelling light, approximately 140 flashes can be produced at full power.

Using a 1,000 Ws flash unit at the same time as a 500 Ws flash unit (both without a modelling light), approximately 40 flashes can be produced by both units at full power.

10 Charging the battery

The battery can be charged inside or outside the apparatus.

The following charging devices may be used:

- *QUICK charger,*
  Item No. 5670 (HENSEL) or Item No. 31 002 (VISIT)
- *PREMIUM charger,*
  Item No. 5671 (HENSEL)

  Both chargers are multivoltage and can be operated all over the world on mains sockets.
- *CC3 Car Charger,*
  Item No. 31 001
  Using the Car Charger, the battery can be charged by connecting it to the cigarette-lighter socket of your car.

  Important: The engine must be running, otherwise there is a risk of running down your car battery and the car will not be able to start again.

To charge the battery, connect the charger output connector to the CHARGE socket **1** of the mobile power generator and tighten the securing screws.

Alternatively, you can connect the charging connector to the same socket on the battery tray. To accomplish this, the battery tray must be removed from the apparatus by pressing on the locking clip and pulling the tray out at the same time.

Important: It is absolutely essential that the mobile power generator be switched off prior to the removal of the battery tray and that any loads be disconnected from the apparatus.

The charging time amounts to 2 to 4 hours and depends on the charger and the age of the battery.

11 Car Adapter

The Car Adapter, Item No. 979, is used instead of the battery tray. An external 12V acid lead battery can be attached to both terminals. The red terminal must be connected to the positive pole and the black terminal must be connected to the negative pole of the external battery. By using the external battery, capacity can be increased considerably. In this way equipment can be operated for a longer time than with the internal battery. Thus, flash devices can produce a greater number of flashes.

Important: Please switch off the apparatus before connecting the car adapter. The apparatus may be switched on again only when the terminals are correctly polarised and firmly attached.

12 Technical data*

Device version:	**MPG 1500 230V**	**MPG 1500 115V**
Nominal voltage	12V	12V
Battery connection	plug-in connection	
Battery / weight	12V/7.2Ah / 3.1 kg	
Number of sockets	2	2
Input voltage range	11...14.5V	11...14.5V
Max. battery output / safeguards	55A / 80A	55A / 80A
Typical power consumption	12W	12W
Minimum battery capacity (Ah)	7.2Ah	7.2Ah
Output voltage	230V +/- 2%	230V +/- 2%
Output frequency	50Hz +/-1%	50Hz +/-1%
Output current (continuous)	1.5A	3A
Typical efficiency factor	90%	90%
Empty battery warning	3 LEDs	3 LEDs
Deep discharge protection		
switch-off threshold	10.4V	10.4V
switch-on threshold	10.8V	10.8V
Operating temperature range:	10...40°C	10...40°C
Dimensions (L x W x H) in mm	230 x 328 x 123	230 x 328 x 123
Weight (kg)	4.0 kg	4.0 kg
Item No:	976	977

*: Subject to technical modifications. Values measured at 230V/115V. Information about weight and size is approximate.

13 Troubleshooting

No function, no display
Inspect the fuse in the battery tray. Only white fuses with a red horizontal stripe should be used.

The error light is on
If there is an electronic error or if the appliance becomes overheated, error light **5** will come on. In this event, the apparatus should be switched off immediately.

14 Maintenance

The MPG (mobile power generator) requires little maintenance by the user. In order to ensure electrical safety, only a dry cloth must be used to clean dust and dirt off the outside of the apparatus.
In the event of electrical malfunction, the apparatus must be taken out of operation immediately and taken to an authorised VISIT or HENSEL customer service department.

Only a dry cloth should be used to clean the apparatus. No liquid should ever be used to clean it. Before cleaning, all equipment should be disconnected from the apparatus and the mobile power generator should be switched off.
Service and repairs should only be performed by authorised customer service personnel. Under no circumstances should the generator be opened. (Caution: high voltage, danger of death!)

Changing the fuse

Safeguarding the charging of the battery
If the safety fuse **(3)** burns out and needs to be changed, all equipment should be disconnected from the apparatus replacing the fuse. Only 6.3 A medium time lag fuses (6.3 AM) may be used.

Safeguarding the battery
The battery tray must be equipped with a white fuse with a red horizontal stripe. This fuse protects the battery. Defective fuses can be replaced by the user.

There is another fuse for the battery located inside the apparatus and that one cannot be changed by the user. This fuse is only triggered by serious malfunction. If this happens, the apparatus must be sent in for repair to an authorised service provider.

Regular inspection
National safety regulations require that the inspection and maintenance of electrical equipment and appliances be performed at regular intervals. Generators must be inspected regularly to ensure their safe operation. An annual inspection of these appliances helps to ensure the safety of the user and preserves the value of the equipment.

Returning your generator to Customer Service
In order to ensure the best protection for shipping, keep the original packaging of your appliance.

15 Waste disposal

The mobile power generator's packaging materials should be separated and recycled. Worn-out and defective appliances must be sent to electronic and electrical equipment recycling centres.

16 Accessories

QUICK charger :	Item No..: 31002 (VISIT) Item No.: 5670 (HENSEL)
PREMIUM charger:	Item No.: 5671
VISIT CC3 Car Charger:	Item No.: 31001
VISIT Car Adapter:	Item No.: 979

17 Customer service

VISIT GmbH & Co. KG
GERMANY
- Service Department -
Robert-Bunsen-Str. 3 Tel.: +49 931 27090 0
D-97076 Würzburg Fax: +49 931 27090 35

18 EC DECLARATION OF CONFORMITY

concerning electromagnetic compatibility

Manufacturer and holder of the certificate:	VISIT GmbH & Co.KG Robert-Bunsen-Str. 3 D-97076 Würzburg
Date of test report:	September 1, 2006
Products:	VISIT **MPG 1500** Mobile power generator
Test description:	Emissions and immunity
Test standards:	EN 50 081-1 / EN 55 014 / EN 60 555 EN 50 082-1 / EN 61 000-4-2/3/4/5

This declaration of conformity is provided by the aforementioned manufacturer pursuant to Article 10, paragraph 1 of the Council Directive of May 3, 1989 concerning the approximation of the laws of the Member States relating to electromagnetic compatibility (89/336/EEC). The declaration makes no representation with reference to protection requirements relating to electromagnetic compatibility under other legal provisions which are subject to the implementation of European Union Directives other than the EMC Directive.

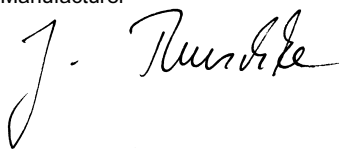
Test description:	Low voltage directive
Test standards:	EN 60491:96.10 / EN 60598-1:2001.06 / EN 60598-2-9:92.05

This declaration of conformity is provided by the aforementioned manufacturer pursuant to Article 10, paragraph 1 of the Council Directive of February 19, 1973 concerning the approximation of the laws of the Member States relating to electrical equipment designed for use within certain voltage limits (73/23/EEC).

These declarations are valid for the product described above.

Date of the declaration of conformity: September 1, 2006

Manufacturer



J. Renschke
- Managing Director -
VISIT GmbH & Co. KG

VISIT
GmbH & Co.KG
Robert-Bunsen-Str. 3
D-97076 Würzburg-Lengfeld
GERMANY

Tel./Phone:	+49 (0) 931/27090-0
Fax:	+49 (0) 931/27090-35
E-Mail:	info@visit-gmbh.de
Internet:	http://www.visit-gmbh.de